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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte SEHAT SUTARDJA

Appeal 2009-001719 Application 09/659,693 Technology Center 2600

Decided:1 June 4, 2009

Before JOSEPH F. RUGGIERO, CARLA M. KRIVAK, and KARL D. EASTHOM, *Administrative Patent Judges*.

KRIVAK, Administrative Patent Judge.

DECISION ON APPEAL

<sup>&</sup>lt;sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

Appellant appeals under 35 U.S.C. § 134 from a final rejection of claims 1-23, 25, 26, 28-48, 97-112, and 169-172. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part and enter a new ground of rejection, pursuant to our authority under 37 C.F.R. § 41.50(b).

#### STATEMENT OF CASE

Appellant's claimed invention is an apparatus for recording and reproducing digital data. The apparatus includes a miniature hard disk drive for storing digital data.

Independent claim 1, reproduced below, is representative of the subject matter on appeal.

# 1. A media player/recorder comprising:

- a storage device to store compressed media data:
- a programmable processor which is programmed as a storage controller to retrieve the compressed media data stored in said storage device;
- a memory to store the compressed media data retrieved by said programmable processor,
- wherein said programmable processor is also programmed as a digital signal processor to decompress the compressed media data stored in said memory; and
- an output circuit to output the decompressed media data from said programmable processor.

#### REFERENCES

Terui	US 5,903,871	May 11, 1999
Yanagihara	US 6,233,393 B1	May 15, 2001
		(filed Sept. 18, 1997)

Gadre US 6,308,253 B1 Oct. 23, 2001 (filed Mar. 13, 1999)
Birrell US 6,332,175 B1 Dec. 18, 2001 (filed Feb. 12, 1999)

The Examiner rejected claim 172 under 35 U.S.C. § 101.

The Examiner rejected claims 1-4, 6, 9, 11-13, 15, 18, 22, 23, 28-31, 33, 36, 38-40, 42, 45, 97, 98, 100, 101, 104-107, 109, 110, and 169-172 under 35 U.S.C. § 102(e) based upon the teachings of Birrell.

The Examiner rejected claims 7, 16, 34, and 43 under 35 U.S.C. § 103(a) based upon the teachings of Birrell.

The Examiner rejected claims 5, 14, 20, 32, 41, 47, 99, 102, 103, 108, 111, and 112 under 35 U.S.C. § 103(a) based upon the teachings of Birrell and Gadre.

The Examiner rejected claims 8, 17, 25, 35, and 44 under 35 U.S.C. § 103(a) based upon the teachings of Birrell and Yanagihara.

The Examiner rejected claims 21 and 48 under 35 U.S.C. § 103(a) based upon the teachings of Birrell, Gadre, and Yanagihara.

The Examiner rejected claims 10, 19, 26, 37, and 46 under 35 U.S.C. § 103(a) based upon the teachings of Birrell and Terui.

The Examiner rejected claims 1-23, 25, 26, 28-48, and 97-112 under the judicially created doctrine of obviousness-type double patenting over copending applications 10/184,302, 10/184,299, and 10/184,505.

Appellant contends that Birrell fails to teach or suggest a "programmable processor programmed as both a storage controller to retrieve compressed media data stored in a storage device and a digital

signal processor to decompress the compressed media data" (App. Br. 16) (emphasis omitted)).<sup>2</sup>

## ISSUES

Has Appellant shown that the Examiner erred in rejecting claim 172 under 35 U.S.C. \$ 101?

Has Appellant shown that the Examiner erred in finding that Birrell teaches all the elements of Appellant's claimed invention?

Has Appellant shown that the Examiner erred in finding that various combinations of Birrell, Gadre, Terui, and Yanagihara suggest Appellant's claimed invention?

Has Appellant established that the double patenting rejection over Appellant's co-pending applications is in error?

## FINDINGS OF FACT

- Appellant's invention is directed to a media player/recorder that includes a programmable processor. The processor is programmed as a storage controller that retrieves compressed media data stored in a storage device. The processor is also programmed as a digital signal processor to decompress the compressed media data stored in a memory (Spec. 7:14-17; Spec 8:8-32; Spec. 9:21-29).
- Birrell teaches a system and method for storing data on a portable audio player and playing the stored data such that power

<sup>2</sup> The Appeal Brief filed August 18, 2006, is referred to throughout this opinion. The Response to Notification of Non-Compliant Appeal Brief, filed July 2, 2007, added nothing new to that already provided in the abovementioned Appeal Brief; thus, no reference is made to this Response.

consumption is minimized (col. 1, ll. 4-7). A hard disk 104 includes at least four gigabytes of storage (col. 4, ll. 38-40) and has a disk controller 106 associated therewith (col. 4, ll. 4-5). A processor 102 and a volatile storage unit (RAM) 108 are provided (col. 4, ll. 3, 6-7).

- 3. In Birrell, the system's read only control memory (ROM) stores control programs (col. 4, Il. 10-12). The control programs include a decompression procedure for decompressing compressed audio data (col. 5, Il. 22-23) and a play procedure (col. 5, Il. 20-21).
- 4. In Birrell, data is transferred from the disk to RAM by the play procedure (col. 6, ll. 14-16).

#### PRINCIPLES OF LAW

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

"The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See In re Kalm*, 441 F.3d 977, 987-988 (Fed. Cir. 2006); *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991); *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been

obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.' KSR, 550 U.S. at 406.

"'The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." Leapfrog Enters., Inc. v. Fisher-Price, Inc., 485 F.3d 1157, 1161 (Fed. Cir. 2007) (quoting KSR, 550 U.S. at 416). "One of the ways in which a patent's subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims." KSR, 550 U.S. at 419-20.

The KSR Court further recognized that "[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp." *Id.* at 402. In such circumstances, "the fact that a combination was obvious to try might show that it was obvious under § 103." *Id.* at 421.

An improvement in the art is obvious if "it is likely the product not of innovation but of ordinary skill and common sense," *Id.* 

"[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). If the Examiner's burden is met, the burden then shifts to Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *Id.* 

#### ANALYSIS

## § 101 Rejection

The Examiner rejected claim 172 under 35 U.S.C. § 101. Since Appellant has not demonstrated any error in the Examiner's rejection as the response does not address this rejection in the Appeal Brief (App. Br. 14). Therefore, this rejection is sustained pro forma.

# Anticipation

The Examiner rejected claims 1-4, 6, 9, 11-13, 15, 18, 22, 23, 28-31, 33, 36, 38-40, 42, 45, 97, 98, 100, 101, 104-107, 109, 110, and 169-172 under 35 U.S.C. § 102(e) based upon the teachings of Birrell. Appellant addresses this rejection with respect to representative claim 1 since independent claims 11, 22, 28, and 38 include substantially the same features as claim 1 (App. Br. 16).

The Examiner finds that Birrell's procedures (programs) include control programs executed by the system's data processor (FF3). The control programs include a play procedure and a decompression procedure (Ans. 22-23; FF3). The play procedure is executed and controlled by a CPU and transfers data from a disk to RAM (FF4). Thus, the play procedure corresponds to a programmable processor programmed as a storage controller and the decompression procedure corresponds to a programmable processor programmed as a digital signal processor to decompress the compressed media data stored in memory (Ans. 23). Therefore, the Examiner finds that Birrell teaches a programmable processor programmed as both a storage controller and digital signal processor, as claimed by Appellant (Ans. 23). Additionally, the Examiner finds that, although Birrell

teaches all the elements claimed by Appellant, they are "discrete elements" (Ans. 24).

Appellant asserts that Birrell's programmable processor does not act as both a storage controller and digital signal processor (App. Br. 16). Rather, Birrell discloses a "CPU 102 and a separate disk controller 106" (App. Br. 17) (emphasis omitted); FF2; col. 2, ll. 60-62). Further, Appellant contends, "the language 'initiates the transfer of additional data from disk 104 to RAM 108' is not analogous to being programmed as a storage controller, as the CPU 102 clearly relies on the disk controller 106 to function as a storage controller" (App. Br. 17). Appellant states, correctly so, that "merely initiating and/or requesting data transfers from a disk is not analogous to performing the functions of a storage controller" (Reply Br. 2) (emphasis omitted).

Thus, because Birrell teaches a discrete storage controller and digital signal processor, as recognized by the Examiner, claim 1 and, accordingly, claims 2-4, 6, 9, 11-13, 15, 18, 22, 23, 28-31, 33, 36, 38-40, 42, 45, 97, 98, 100, 101, 104-107, 109, 110, and 169-172 are not anticipated by Birrell.

Obviousness

Claims 7, 16, 34, and 43

The Examiner rejected claims 7, 16, 34, and 43 under 35 U.S.C. § 103(a) based upon the teachings of Birrell.

Appellant grouped these claims together with the claims rejected under 35 U.S.C. § 102, stating that they are allowable for the reasons presented with respect to clams 1, 11, 22, 28, and 38 (App. Br. 18).

Although Birrell does not anticipate the independent claims because the storage controller and digital signal processor are discrete elements, as set forth above, Birrell does teach all the elements of Appellant's claimed invention. As noted by the Examiner, because the CPU of Birrell exerts control over the storage device using a play procedure and also operates to decompress audio data using a decompression procedure, Birrell meets the limitations of "a programmable processor programmed as both a storage controller to retrieve compressed media data stored in a storage device and a digital signal processor to decompress the compressed media data" (Ans. 10, 23). It would have been obvious to an ordinarily skilled artisan at the time of Appellant's invention to include a disk controller in the microprocessor, as taught by the control programs of Birrell (FF3; col. 5, Il. 29-33; Ans. 23), since combining the controller and DSP would be no more than the combination of familiar elements according to known methods and does no more than yield predictable results. Further, as recited in claims 7, 16, 34, and 43, Birrell also teaches using various compression techniques such as MPEG, or MP3 (col. 1, 1, 55-col. 2, Il. 5).

Because Appellant has not provided any arguments regarding this obviousness rejection, and merely relies on the anticipation rejection, for the above reasons, claims 7, 16, 34, and 43 are obvious over Birrell.

Claims 5, 14, 20, 32, 41, 47, 99, 102, 103, 108, 111, and 112

The Examiner rejected claims 5, 14, 20, 32, 41, 47, 99, 102, 103, 108, 111, and 112 under 35 U.S.C. § 103(a) based upon the teachings of Birrell and Gadre. The Examiner finds that Gadre teaches integrating functionality of multiple DSP chips onto the same integrated circuit (Ans. 11, 25).

Appellant argues that the combination of Birrell and Gadre fails to teach or suggest that the programmable processor is programmed as both the

storage controller and the digital signal processor where "the processor comprises a single integrated circuit" (App. Br. 19) (emphasis omitted).

Appellant argues, with respect to independent claims 20 and 47, that neither Birrell nor Gadre "discloses a programmable processor that is programmed as both a digital signal processor to decompress compressed media data and a storage controller" (App. Br. 25) (emphasis omitted).

However, it should be noted that this rejection is an obviousness rejection and not an anticipation rejection. In addition, Gadre was relied on to show that functions can be implemented on one chip, and thus, it would be obvious to modify Birrell to include the controller and processor on a single circuit/microprocessor (Ans. 26). Accordingly, since combining the controller and DSP would be no more than the combination of familiar elements according to known methods and does no more than yield predictable results, as set forth above, claims 5, 14, 20, 32, 41, 47, 99, 102, 103, 108, 111, and 112 are obvious over Gadre and Birrell.

# Claims 8, 17, 25, 35, and 44

The Examiner rejected claims 8, 17, 25, 35, and 44 under 35 U.S.C. 
§ 103(a) based upon the teachings of Birrell and Yanagihara. The Examiner finds that Yanagihara teaches a digital processor determining a compression format and retrieving the compressed data from the storage device in accordance with the determined compression format (Ans. 15). The Examiner also states that Yanagihara was not relied upon to retrieve to decompress a number of formats, but rather, to show that it was known in the art at the time of the invention to read media data and determine the compression format as taught by Yanagihara (Ans. 28).

Appellant asserts that Birrell fails to "explicitly disclose" that a digital signal processor determines a compression format of the media data stored in the memory and retrieves the process according to the determined compression format (App. Br. 22), as recited in claim 8 (and claims 17, 25, 35, and 44).

In view of the findings above with respect to Birrell that combining the controller and DSP would be no more than the combination of familiar elements according to known methods and does no more than yield predictable results, combining Birrell with Yanagihara to obtain claims 8, 17, 25, 35, and 44 would be an obvious combination.

## Claims 21 and 48

The Examiner rejected claims 21 and 48³ under 35 U.S.C. § 103(a) based upon the teachings of Birrell, Gadre, and Yanagihara. Appellant has not addressed this rejection except to state that claim 48 is allowable for the reasons presented with respect to claims 8, 22, and 47 (App. Br. 27). The Examiner set forth a prima facie case of obviousness on pages 17-19 of the Answer. Because Appellant failed to rebut the Examiner's findings, claims 21 and 48 are obvious over the collective teachings of Birrell, Gadre, and Yanagihara.

# Claims 10, 19, 26, 37, and 46

The Examiner rejected claims 10, 19, 26, 37, and 46 under 35 U.S.C. § 103(a) based upon the teachings of Birrell and Terui. Appellant has not addressed this rejection. Thus, for the reasons provided by the Examiner on

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<sup>&</sup>lt;sup>3</sup> Appellant addresses claims 23 and 48 on page 27 of the Brief, but does not mention claim 21. It is assumed that Appellant meant to address claim 21, and the reference to claim 23 is a typographical error.

pages 19-20 of the Examiner's Answer, and those set forth above, claims 10, 19, 26, 37, and 46 are obvious over Birrell and Terui.

Judicially Created Obviousness-Type Double Patenting

The Examiner rejected claims 1-23, 25, 26, 28-48, and 97-112 under the judicially created doctrine of obviousness-type double patenting over copending applications 10/184,302, 10/184,299, and 10/184,505. Appellant has not addressed this rejection and a terminal disclaimer has not been filed in this application. Thus, we affirm this rejection pro forma.<sup>4</sup>

#### NEW GROUND OF REJECTION

Pursuant to 37 C.F.R. § 41.50(b), a new ground of rejection is entered. Independent claims 1, 11, 22, 28, 38, and 169-172 are rejected under 35 U.S.C. § 103 as obvious over Birrell. As noted by the Examiner, although Birrell does not explicitly teach each of the claimed elements, one ordinarily skilled in the art would likely modify a media recorder to combine a digital signal processor and a controller in a microprocessor as this would be combination of familiar elements according to known methods and would yield no more than predictable results (*Leapfrog* at 1161, *supra*). The dependent claims are not addressed here and are left to the Examiner to examine.

#### CONCLUSION

The Examiner did not err in rejecting claim 172 under 35 U.S.C § 101.

<sup>&</sup>lt;sup>4</sup> The Examiner should take into consideration the current status of the existing applications as all of them have issued as U.S. patents.

The Examiner erred in rejecting claims 1-4, 6, 9, 11-13, 15, 18, 22, 23, 28-31, 33, 36, 38-40, 42, 45, 97, 98, 100, 101, 104-107, 109, 110, and 169-172 under 35 U.S.C. § 102(e).

The Examiner did not err in rejecting claims 5, 7, 8, 10, 14, 16, 17, 19, 20, 21, 25, 26, 32, 34, 35, 37, 41, 43, 44, 46, 47, 48, 99, 102, 103, 108, 111, and 112 under 35 U.S.C. § 103.

The Examiner did not err in rejecting claims 1-23, 25, 26, 28-48, and 97-112 under the judicially created doctrine of obviousness-type double patenting.

# DECISION

The Examiner's decision rejecting claims 1-23, 25, 26, 28-48, 97-112, and 172 is affirmed

The Examiner's decision rejecting claims 169-171 is reversed and a new ground of rejection of claims 1, 11, 22, 28, 38, and 169-172 under 35 U.S.C. § 103(a) as obvious over Birrell is entered.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b) (2008). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that Appellant, <u>WITHIN TWO</u>

<u>MONTHS FROM THE DATE OF THE DECISION</u>, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the Examiner, in which event the proceeding will be remanded to the Examiner. . . .
- (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

# AFFIRMED-IN-PART

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HARNESS, DICKEY & PIERCE P.L.C. 5445 CORPORATE DRIVE SUITE 200 TROY MI 48098